



Experimental techniques using 4f coherent imaging system for measuring nonlinear refraction

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Résumé en anglais	<p>In this paper we briefly review experimental techniques exploiting all-optical Fourier image processing inside the 4f system in order to characterize nonlinear refractive indices. Advantages and inconveniences of imaging characterization methods are outlined and their sensitivities are compared in the context of thin films measurements (that is small nonlinear phase-shift). Comparison of imaging methods with well-known nonlinear characterization techniques such as degenerate four wave mixing, I-scan and Z-scan is also done. The influence of nonlinear absorption on sensitivity of nonlinear refraction measurements is discussed.</p>
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